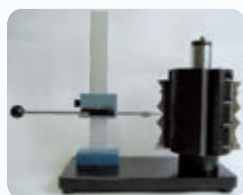


# Measuring instruments

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PRE SET P322  
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CALIPER FOR CUTTER Z=3  
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PRE SET LEADER  
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PRE SET P368  
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ANGOLFAST  
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GAUGE FOR LINEAR MEASUREMENTS  
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GAUGE FOR LINEAR MEASUREMENTS  
WITH STEEL PLATES  
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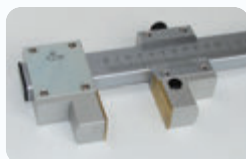
GAUGE FOR DISTANCE BETWEEN HOLES  
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GAUGE FOR 90° V-FOLD CUTS  
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GAUGE FOR INSIDE/OUTSIDE  
MEASURING  
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GAUGE FOR INSIDE/OUTSIDE  
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GAUGE FOR LINEAR MEASUREMENTS  
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GAUGE FOR LINEAR MEASUREMENTS,  
DISTANCE FROM THE CENTRES OF  
THE HOLE TO THE EDGE OF THE PANEL  
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# Klein®



GAUGE FOR LINEAR MEASUREMENTS,  
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GAUGE FOR LINEAR MEASUREMENTS,  
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GAUGE FOR 45° CUTS  
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GAUGE FOR DIAGONAL AND OUT  
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GAUGES FOR LINEAR MEASUREMENTS  
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GAUGES FOR LINEAR-INSIDE/OUTSIDE  
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GAUGE FOR LINEAR, INSIDE/OUTSIDE,  
DISTANCE BETWEEN HOLES, OUT OF  
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GAUGE FOR 45° CUTS  
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GAUGE FOR LINEAR, INSIDE/OUTSIDE,  
DISTANCE BETWEEN HOLES, OUT OF  
SQUARE ANGLES MEASUREMENTS  
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GAUGE FOR LINEAR MEASUREMENTS,  
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GAUGE WITH NONIUS FOR  
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GAUGE WITH WIRELESS CONNECTION  
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GAUGE WITH WIRELESS CONNECTION  
FOR LINEAR, INSIDE/OUTSIDE,  
DISTANCE BETWEEN HOLES,  
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MAGNETIC STRIP MEASURING SYSTEM  
Page 15.23



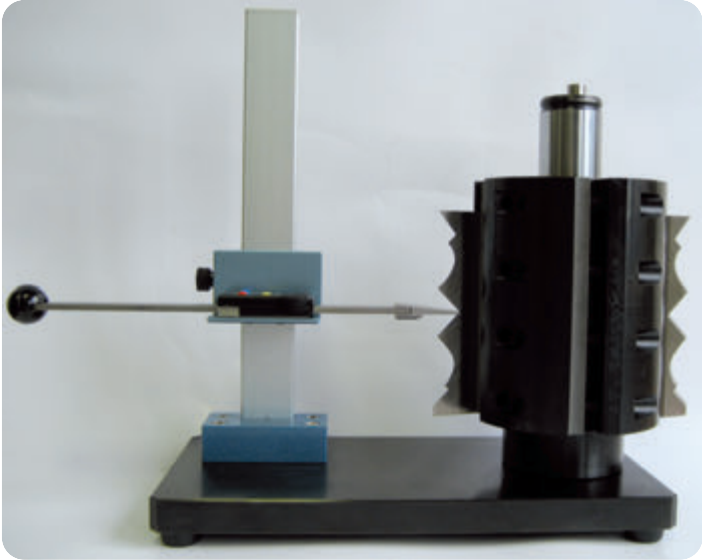
ELECTRONIC WORK STATION  
Page 15.24 - 15.25

**PRE SET P322**

The radius measuring stand is a precision device of simple and quick use, suitable to measure the radius of profiled cutterheads. Before mounting the tools in a machine it is absolutely important to know the correct dimensions of the cutter and set them in order to start the production without any additional concerns.

The **Preset P322** was designed and developed in collaboration with technicians who work daily with these type of tools, having troubles with setting operations. The result is an optimization of the production and a good saving of time.

The **Preset P322** is the best accessory beside a moulding or a CNC machine.



**Main features**  
Arbor height: 230 mm  
R max (cutterhead radius): 120 mm

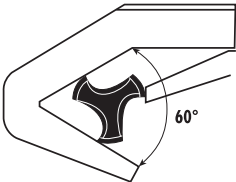
**Digital readout:**  
Resolution: 0,01 mm  
Readout in mm/inches  
Battery-power (SR44)  
Operating temperature range: 0/+40°  
Storage temperature range: -10/+60°  
Umidity: ≤ 80%

Item	ØArbor	Height	R max
PRE-SET P322/30	30	230	120
PRE-SET P322/35	35	230	120
PRE-SET P322/40	40	230	120
PRE-SET P322/32	1" 1/4"	230	120
PRE-SET P322/38	1" 1/2"	230	120
PRE-SET P322/46	1" 13/16"	230	120

**THREE POINT DIGITAL CALIPER FOR CUTTERS Z=3**

**ART. C.DIGIT.Z3**

Caliper for measuring the diameter of router bits with three cutting edges (our items T143/T144, T153/T154 and any cutter Z=3)



- Measuring range: 4 mm ÷ 40,00 mm / 0,16" ÷ 1,73"
  - Resolution: 0,01 mm/0,0005"
  - Accuracy: ± 0,05 mm/± 0,002"
  - Repeatability: 0,01 mm/0,0005"
  - Maximum measurement speed: 1,5 m/s - 60 in/s
- Operating temperature: 0°C÷40°C
  - Storage temperature: -10°C÷60°C
  - Power: 1,5V SR44 (silver oxide cell) - 1 battery
  - Battery life: 1 year continuous usage/  
3 years under normal operation

Item	Measuring range
C.DIGIT.Z3	4÷40 mm

## PRE SET LEADER

**Preset LEADER** are high precision instruments performing high technology operations. Their structure is guaranteed by best quality components along with an interface very simple and intuitive to use.

Designed and developed in the field of tooling manufacture, the **preset LEADER** are also essential in sharpening centers and production units of furniture or windows, for checking the condition of the tools and their settings before being mounted in the machine.

In recent years the family of the **preset LEADER** has increased thanks to additional models with new combinations of diameter and height, satisfying most of the needs of market operators.

Moreover, after checking by our technical department, presetter devices with special dimensions can also be constructed on request.



Item	Measuring range
PRE-SET LEADER 33	H 360 mm - Ø 320 mm
PRE-SET LEADER 35	H 500 mm - Ø 320 mm
PRE-SET LEADER 53	H 360 mm - Ø 520 mm
PRE-SET LEADER 55	H 500 mm - Ø 520 mm

### TECHNICAL FEATURES:

- Structural components heat treated
- High resolution CMOS Camera
- Telecentric lenses
- Measurement field 7x7
- Optical zoom 40x
- Digital zoom 16x
- Recirculating ball bearing linear guides with preloaded slides
- Micrometric movements by control knob
- Interchangeable tooling holder
- Housed-in PC
- 17" TFT colour monitor
- Mouse
- 7 USB outputs
- 1 Ethernet-Lan output

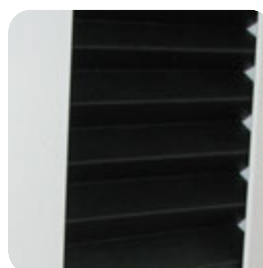
Leader	Dimension	Weight	Power
33	B 1100 P 620 H 900 mm	115 kg	230 V (on request 110V)
35	B 1200 P 620 H 1040 mm	121 kg	
53	B 1200 P 620 H 900 mm	131 kg	
55	B 1200 P 620 H 1040 mm	137 kg	



Telecentric lenses



High resolution camera



Protective bellows



Micrometric adjustment

### SPARE CONE-HOLDERS

The **preset LEADER** are supplied with a cone-holder (ISO30, ISO40, ISO50, HSK63) on your choice. Other cone-holders can also be purchased later.

Cone-holders for  
**PRESET LEADER**  
(Production  
after  
June 2012  
Starting from  
serial no.  
Y12/L1178)



Item	Description
PRE-SET BL.ISO 30	for tool holders ISO 30
PRE-SET BL.ISO 40	for tool holders ISO 40
PRE-SET BL.ISO 50	for tool holders ISO 50
PRE-SET BL.HSK 63F	for tool holders HSK 63F/D/B
PRE-SET BL.HSK 63A	for tool holders HSK 63A/C/E
PRE-SET BL.HSK 80A	for tool holders HSK 80
PRE-SET BL.30x130	with arbor L=130, for tools with bore d= 30
PRE-SET BL.30x300	with arbor L=300, for tools with bore d= 30
PRE-SET BL.35x130	with arbor L=130, for tools with bore d= 35
PRE-SET BL.35x300	with arbor L=300, for tools with bore d= 35
PRE-SET BL.40x130	with arbor L=130, for tools with bore d= 40
PRE-SET BL.40x300	with arbor L=300, for tools with bore d= 40
PRE-SET BL.50x130	with arbor L=130, for tools with bore d= 50
PRE-SET BL.50x300	with arbor L=300, for tools with bore d= 50



Cone-holders for **PRESET LEADER**  
Production before June 2012  
Until serial no. Y12/L1177)

Item
PRE-SET B. ISO 30
PRE-SET B. ISO 40
PRE-SET B. ISO 50
PRE-SET B. HSK 63 F

The software, CVS (Conti Vision System), was designed in-house and further developed in collaboration with the professionals and machine operators to ensure the completeness of the functions and best ease of use. It is Windows-based and can be updated via Internet connection.

#### CVS Software features:

Tool diameter and height measuring performed:

- with Fixed Axis:  
manual detection, by approaching the profile of the tool
- with Mobile Axis:  
automatic detection, simply by rotating the tool

Real view function

Storing of 200 machine origins

Storing of 20.000 tools

Tool list creation

Storing of tool profile

Printing of tool profile

Printing of labels

Printing of screenshot

Alphanumerical keyboard on screen

Various geometrical functions:

- Radius
  - Angle
  - Perpendicularity
  - Tangent
  - Goniometer function on screen
- Etc.

Language selection

Online software update

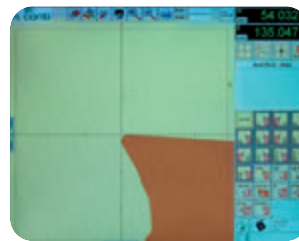
Optional:

Touch screen

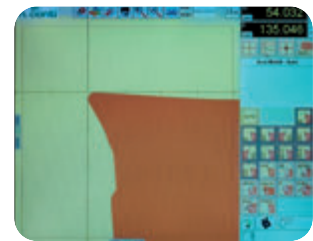
Tool file generation for sending data to CNC machines

Setting for Balluff sensor

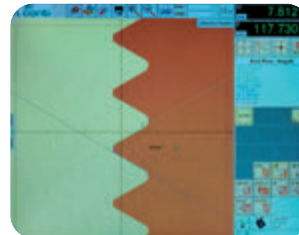
#### Example of measurements taken using the Conti Vision System (CVS)



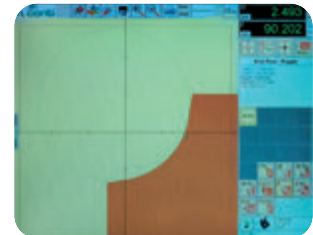
Measuring in  
"fixed axe" mode



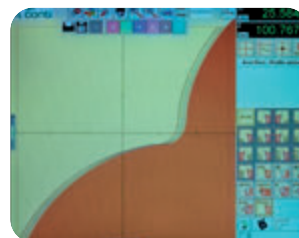
Measuring in  
"movable axe" mode



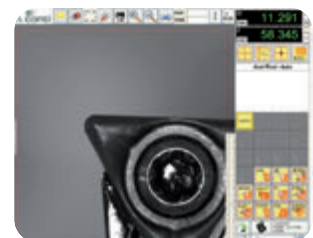
Angle measurement



Radius measurement



Comparing multiple  
shaped cutters



Real view

#### Optional



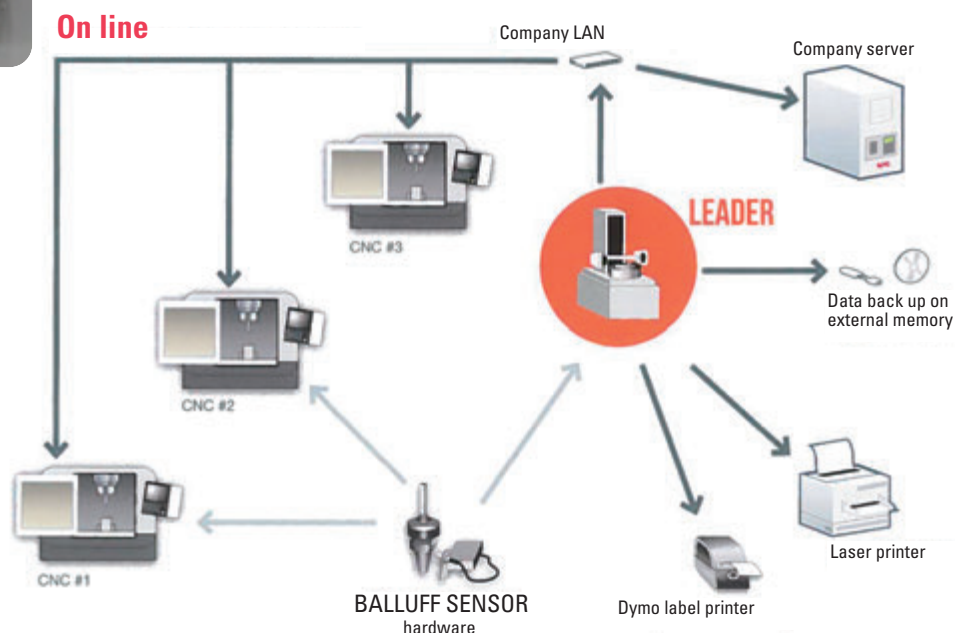
Holding cart



Label  
printer



A4 laser  
printer





## PRE SET P368LR

The **Preset P368LR** is a precision tool setting instrument, easy and quick to use, especially designed to meet the requirements of the NC machine operators. It is mainly used in the wood, metal and glass working field where there is a constant need to set or adjust the tools.

The **Preset P368LR** measures both the radius/diameter and the length/height of the tools. Working with different tool holders or various machines can be set up to 4 origins. The measures shown in the display can be set directly in the machine and the production quickly starts again.

Item	Measuring range
PRE-SET P368LR	H 300 mm - Ø <b>250</b> mm

- Excellent price/quality relationship
- Considerable cutback of tooling-up times, no waste of material
- 4 machine origins
- It measures shank tools and cutterheads
- Battery powered – no need of electrical plug
- Large display easy to read
- One touch conversion mm/inch
- Interchangeable cone holders (ISO, HSK, VDI, arbors)

### TECHNICAL FEATURES:

#### Slide guides:

X axis: slide guide with preloaded recirculating ball bearings

Z axis: slide guide in anti-friction material

**Measurement detection:** Precision magnetic strip

Dimension	Resolution	Weight	Power
B 410 mm P 150 mm H 540 mm	0,01 mm	12 kg	2 AA Batteries each display (included)

### TIGHTENING DEVICE

Upon request the preset P368LRB can be supplied with a special tightening device. This tightening equipment is suitable only for a first soft tighten of the tool, when adjusting the clamping length in the tool holder. Afterwards, the tool must be strongly tightened on a separate proper clamping device (see our items T139 at page 7.34). Any incorrect use of the P368LRB can invalidate the precision of the whole instrument.



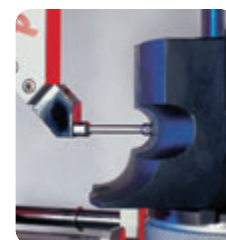
### SPARE CONE-HOLDERS

Item	Description
PRE-SET B.ISO 30	for tool holders ISO 30
PRE-SET B.ISO 40	for tool holders ISO 40
PRE-SET B.ISO 50	for tool holders ISO 50
PRE-SET B.HSK 63F	for tool holders HSK 63F/D/B
PRE-SET B.HSK 63A	for tool holders HSK 63A/C/E
PRE-SET B.HSK 80A	for tool holders HSK 80
PRE-SET B.30x130	with arbor L=130, for tools with bore d= 30
PRE-SET B.30x300	with arbor L=300, for tools with bore d= 30
PRE-SET B.35x130	with arbor L=130, for tools with bore d= 35
PRE-SET B.35x300	with arbor L=300, for tools with bore d= 35
PRE-SET B.40x130	with arbor L=130, for tools with bore d= 40
PRE-SET B.40x300	with arbor L=300, for tools with bore d= 40
PRE-SET B.50x130	with arbor L=130, for tools with bore d= 50
PRE-SET B.50x300	with arbor L=300, for tools with bore d= 50

Item	Description
AS1500014	Support + Blocking fork flange=46
AS1500020	Support + Blocking fork flange=30
AS1500044	Support + Blocking fork flange=41
AS1500062	Support + Blocking fork flange=36
AS1500069	Support + Blocking fork flange=47

Item	Description
AS1500028	Blocking fork flange=36
AS1500029	Blocking fork flange=30
AS1500049	Blocking fork flange=41
AS1500050	Blocking fork flange=45
AS1500051	Blocking fork flange=47
AS1500052	Blocking fork flange=60

The preset **P368LR** are supplied with a cone-holder (ISO30, ISO40, ISO50) on your choice. Other cone-holders can also be purchased later.



### T.SFERA

Spherical feeler for shaped cutters (optional)

Item
T. SFERA-P368

## PRE SET P368XL

The **Preset P368** is a precise instrument, easy and quick to use: these characteristics have been especially designed to meet the requirements of the NC machine operator. It is used in the wood, metal and glass machining industries where the tools must be pre-set or adjusted.

The **Preset P368XL**, can be used for both measuring lengths and radius of the tools.

The **Preset P368XL** is necessary when working with tools with diameter up to 400 mm.



Item	Measuring range
PRE-SET P368XL	H 300 mm - Ø 400 mm
<ul style="list-style-type: none"> <li>- Excellent quality/price relationship</li> <li>- Considerable cutback of tooling-up times</li> <li>- It measures all types of tools</li> <li>- It does not require connection to the electrical mains</li> <li>- Display with large numbers</li> <li>- Interchangeable cone holders (ISO, HSK, VDI, arbors)</li> </ul>	

### MEASURING CAPACITY:

#### Slide guides

Axis X: slide guide with ball recirculation

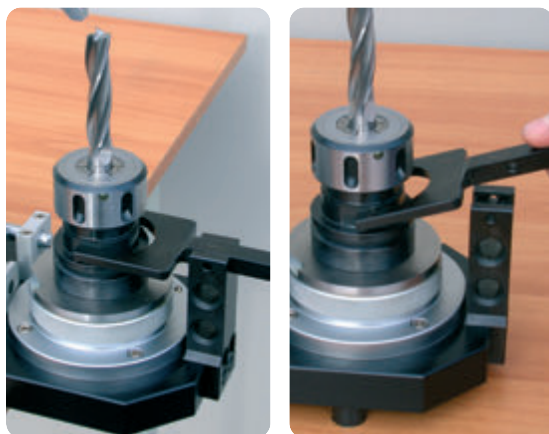
Axis Z: slide guide in anti-friction material

Measurement detection Magnetic strip

Dimension	Resolution	Weight	Power
B 410 mm P 150 mm H 540 mm	0,01 mm	12 kg	2 AA Batteries each display (included)

### TIGHTENING DEVICE

Upon request the preset P368LRB can be supplied equipped with a special tightening device. This tightening equipment is suitable only for a first soft tighten of the tool, when adjusting the clamping length in the tool holder. Afterwards, the tool must be strongly tightened on a separate proper clamping device (see our items T139 at page 7.34). Any incorrect use of the P368LRB can invalidate the precision of the whole instrument.



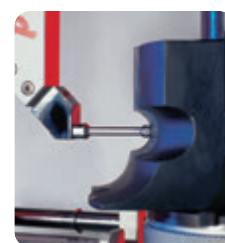
Item	Description
AS1500014	Support + Blocking fork flange=46
AS1500020	Support + Blocking fork flange=30
AS1500044	Support + Blocking fork flange=41
AS1500062	Support + Blocking fork flange=36
AS1500069	Support + Blocking fork flange=47

Item	Description
AS1500028	Blocking fork flange=36
AS1500029	Blocking fork flange=30
AS1500049	Blocking fork flange=41
AS1500050	Blocking fork flange=45
AS1500051	Blocking fork flange=47
AS1500052	Blocking fork flange=60

### SPARE CONE-HOLDERS

Item	Description
PRE-SET B.ISO 30	for tool holders ISO 30
PRE-SET B.ISO 40	for tool holders ISO 40
PRE-SET B.ISO 50	for tool holders ISO 50
PRE-SET B.HSK 63F	for tool holders HSK 63F/D/B
PRE-SET B.HSK 63A	for tool holders HSK 63A/C/E
PRE-SET B.HSK 80A	for tool holders HSK 80
PRE-SET B.30x130	with arbor L=130, for tools with bore d= 30
PRE-SET B.30x300	with arbor L=300, for tools with bore d= 30
PRE-SET B.35x130	with arbor L=130, for tools with bore d= 35
PRE-SET B.35x300	with arbor L=300, for tools with bore d= 35
PRE-SET B.40x130	with arbor L=130, for tools with bore d= 40
PRE-SET B.40x300	with arbor L=300, for tools with bore d= 40
PRE-SET B.50x130	with arbor L=130, for tools with bore d= 50
PRE-SET B.50x300	with arbor L=300, for tools with bore d= 50

The preset **P368XL** are supplied with a cone-holder (ISO30, ISO40, ISO50) on your choice.  
Other cone-holders can also be purchased later.



### T.SFERA

Spherical feeler for shaped cutters (optional)

Item
T. SFERA-P368



## PRE SET P388

The **Preset P388** is a precision instrument that measures the radius and height of a tool by means of a spring-loaded probe and an optical DIAL INDICATOR.

**The DIAL INDICATOR has a double function:**

- 1) The contact between the probe and the tool is not strong, therefore it is possible to measure also particularly fragile tools, such as diamond tools.
- 2) The exact measurement repeating is guaranteed by the DIAL INDICATOR that shows when the tool is in the correct measuring position.

The structure of the **Preset P388** is particularly sturdy thanks also to the Z axis column made of steel and the use of preloaded recirculating ball bearings guides..

Item	Measuring range
PRE-SET P388	H 300 mm - Ø 250 mm

- Excellent price/quality relationship
- Considerable cutback of tooling-up times, no waste of material
- 4 machine origins
- It measures shank tools and cutterheads
- Battery powered – no need of electrical plug
- Large display easy to read
- One touch conversion mm/inch
- Interchangeable cone holders (ISO, HSK, VDI, arbors)

### TECHNICAL FEATURES:

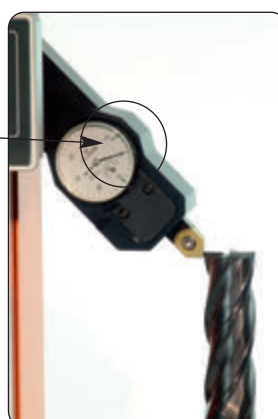
#### Slide guides:

X axis: slide guide with preloaded recirculating ball bearings

Z axis: slide guide with preloaded recirculating ball bearings

**Measurement detection:** Precision magnetic strip

Dimension	Resolution	Weight	Power
B 420 mm P 180 mm H 690 mm	0,01 mm	29 kg	2 AA Batteries each display (included)



How to measure tool radius



How to measure tool length

### SPARE CONE-HOLDERS

Item	Description
PRE-SET B.ISO 30	for tool holders ISO 30
PRE-SET B.ISO 40	for tool holders ISO 40
PRE-SET B.ISO 50	for tool holders ISO 50
PRE-SET B.HSK 63F	for tool holders HSK 63F/D/B
PRE-SET B.HSK 63A	for tool holders HSK 63A/C/E
PRE-SET B.HSK 80A	for tool holders HSK 80
PRE-SET B.30x130	with arbor L=130, for tools with bore d= 30
PRE-SET B.30x300	with arbor L=300, for tools with bore d= 30
PRE-SET B.35x130	with arbor L=130, for tools with bore d= 35
PRE-SET B.35x300	with arbor L=300, for tools with bore d= 35
PRE-SET B.40x130	with arbor L=130, for tools with bore d= 40
PRE-SET B.40x300	with arbor L=300, for tools with bore d= 40
PRE-SET B.50x130	with arbor L=130, for tools with bore d= 50
PRE-SET B.50x300	with arbor L=300, for tools with bore d= 50

**The presets P388** are supplied with a cone-holder (ISO30, ISO40, ISO50) on your choice. Other cone-holders can also be purchased later.



## PRE SET P382

The **Preset 382** is the result of two factors: technology and simplicity of use. Stiffness, precision, repeatability and reliability are the main characteristics of this instrument.

Item	Measuring range
PRE-SET P382	H 300 mm (optional 420 mm) - Ø 260 mm

Dimension	Resolution	Weight	power
B 450 mm P 300 mm H 770 mm	0,01 mm	60 kg	230 V (on request 110V)



### TECHNICAL FEATURES:

Guides with preloaded recirculating ball bearings

### Measurement transducers:

Optical scales

### Electronics:

Alphanumeric keypad

Backlit display

Storing of 100 machine origins

Storing of 100 tools for each machine (total 10.000 tools)

Conversion mm-inches

Conversion radius-diameter

Absolute-incremental measurements

Hold function

Language selection (I-GB-D-F)

Power supply 230V - 50hz

2 serial outputs RS 232 C

Optional

Labels printing

Tools list printing

Origins list printing

### Optional:

Labels printing

Tools list printing

Origins list printing



Detail  
of the step  
feeler



### Item

T. SFERA-P382

Spherical feeler for  
shaped cutters  
(optional)



## SPARE CONE-HOLDERS

Item	Description
PRE-SET B.ISO 30	for tool holders ISO 30
PRE-SET B.ISO 40	for tool holders ISO 40
PRE-SET B.ISO 50	for tool holders ISO 50
PRE-SET B.HSK 63F	for tool holders HSK 63F/D/B
PRE-SET B.HSK 63A	for tool holders HSK 63A/C/E
PRE-SET B.HSK 80A	for tool holders HSK 80
PRE-SET B.30x130	with arbor L=130, for tools with bore d= 30
PRE-SET B.30x300	with arbor L=300, for tools with bore d= 30
PRE-SET B.35x130	with arbor L=130, for tools with bore d= 35
PRE-SET B.35x300	with arbor L=300, for tools with bore d= 35
PRE-SET B.40x130	with arbor L=130, for tools with bore d= 40
PRE-SET B.40x300	with arbor L=300, for tools with bore d= 40
PRE-SET B.50x130	with arbor L=130, for tools with bore d= 50
PRE-SET B.50x300	with arbor L=300, for tools with bore d= 50

- The display has been designed to make any function simple and immediate. It is moreover provided with 2 RS232 C serial outputs and a software for labels printing.
- The cone-holder is made of hardened steel and is quickly interchangeable, always maintaining a perfect centring of the tool.

**The preset P382**  
are supplied  
with a cone-holder  
(ISO30, ISO40, ISO50)  
on your choice.

Other cone-holders can also  
be purchased later.



## ANGOLFAST

the right instruments for measuring angles



**PRECISE  
STURDY  
VERSATILE  
LIGHT  
HANDY  
SIMPLE**

Item	Dimension
ANGOLFAST 45	450 mm
ANGOLFAST 70	700 mm
ANGOLFAST 70S	700 mm with reference shoulder

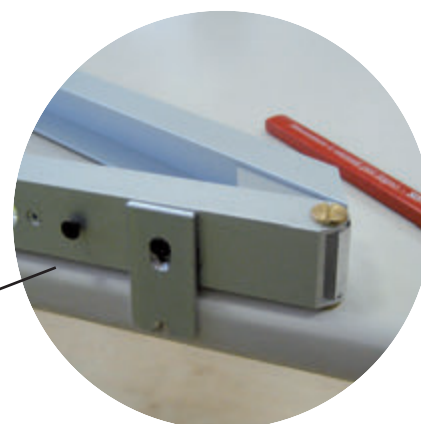
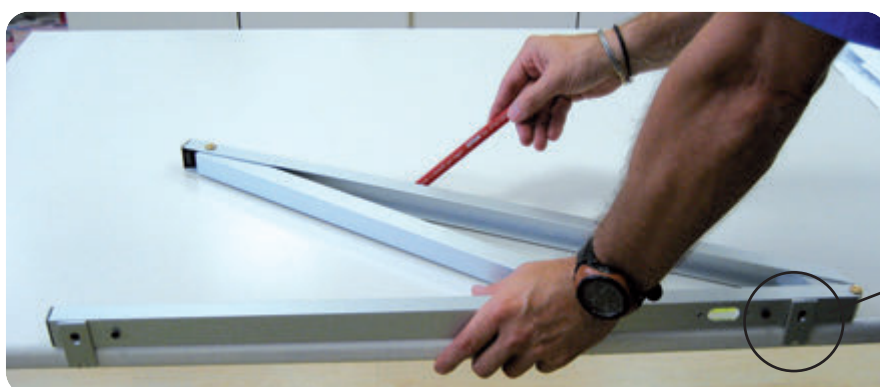
**Angolfast** is made of anodized aluminium, so it is very sturdy but at the same time light and easy to use. It features a shockproof spirit-level and can measure inner angles between 20-135°.

These in brief are the characteristics of this instrument, useful for:

**INTERIOR DECORATORS  
KITCHEN UNIT MANUFACTURERS  
FRAME INSTALLERS  
BRICKLAYERS  
CARPENTERS  
SMITHS  
SURVEYORS  
ARCHITECTS**



Examples of use



**Angolfast 70S** with reference shoulder for easier outlining.

## GAUGES

Modern panel working production technologies have made indispensable the use of appropriate measuring instruments sufficiently precise to achieve high quality standards. The line of gauges shown below has been designed to meet all woodworking measurement needs and these gauges are commonly used even in the working of **aluminium, glass** and **sheet metals**. All the gauges are made of chromium-plate steel with inscribed scale and coloured black; **PRECISION** of 0,1 mm.

### GAUGE FOR LINEAR MEASUREMENTS

ART. C.LIN

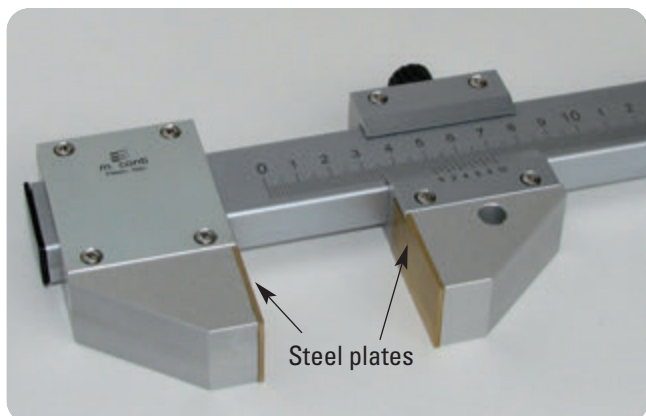


Suitable for measuring wood panel widths and lengths, but also for glass, aluminium profiles and sheet metal.

Item	Measuring range
C.LIN.0500	0÷500
C.LIN.0750	0÷750
C.LIN.1000	0÷1000
C.LIN.1500	0÷1500
C.LIN.2000	0÷2000
C.LIN.2500	0÷2500
C.LIN.3200	0÷3200

### GAUGE FOR LINEAR MEASUREMENTS WITH STEEL PLATES

ART. C.LIN.PA



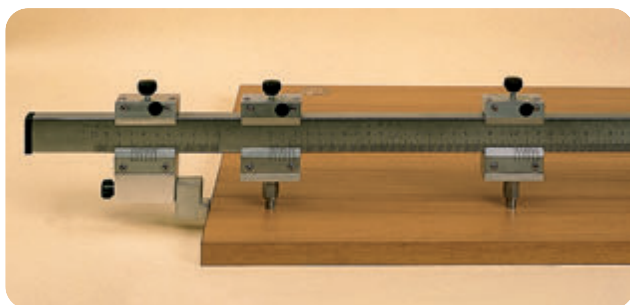
Suitable for measuring widths and lengths in glass, aluminium and sheet metal items.

Plates in TIN coated high resistance steel.

Item	Measuring range
C.LIN.PA0500	0÷500
C.LIN.PA0750	0÷750
C.LIN.PA1000	0÷1000
C.LIN.PA1500	0÷1500
C.LIN.PA2000	0÷2000
C.LIN.PA2500	0÷2500
C.LIN.PA3200	0÷3200

## GAUGE FOR DISTANCE BETWEEN HOLES

ART. C.INT



Practically indispensable for correctly measuring the distance from the edge of the panel to the centre of holes or the centre distance between one hole and another. Supplied with one semi-fixed slider and two moving sliders with dia. 8 pin.

Item	Measuring range
C.INT0500	0÷500
C.INT0750	0÷750
C.INT1000	0÷1000
C.INT1500	0÷1500
C.INT2000	0÷2000
C.INT2500	0÷2500
C.INT3200	0÷3200

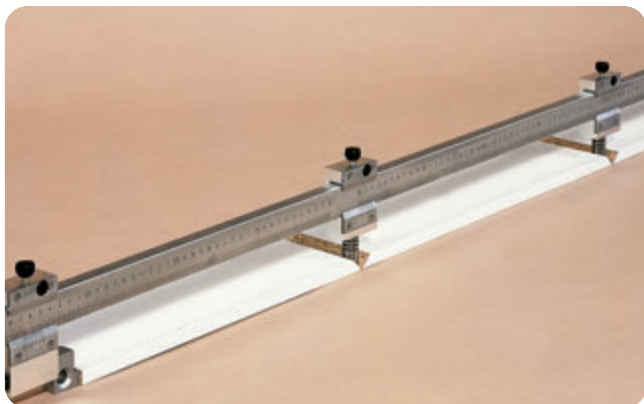
<b>Spare parts</b>	
C.CORS.PER	Spare slider complete with pin
C.PER.0415	Conical pin for dia. 4 - dia. 15 holes

C.PERNO.03	For hole Ø 3	C.PERNO.14	For hole Ø 14
C.PERNO.04	For hole Ø 4	C.PERNO.15	For hole Ø 15
C.PERNO.05	For hole Ø 5	C.PERNO.16	For hole Ø 16
C.PERNO.06	For hole Ø 6	C.PERNO.18	For hole Ø 18
C.PERNO.07	For hole Ø 7	C.PERNO.20	For hole Ø 20
C.PERNO.08	For hole Ø 8	C.PERNO.25	For hole Ø 25
C.PERNO.09	For hole Ø 9	C.PERNO.26	For hole Ø 26
C.PERNO.10	For hole Ø 10	C.PERNO.30	For hole Ø 30
C.PERNO.12	For hole Ø 12	C.PERNO.35	For hole Ø 35

## GAUGE FOR 90° V-FOLD CUTS

ART. C.INV



Suitable for the production of drawers, it features a semi-fixed slider and two moving sliders with V-90° pin.

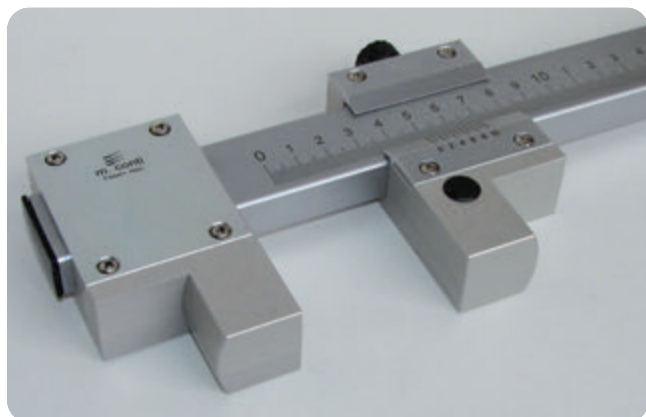
Item	Measuring range
C.INV1000	550÷0÷1000
C.INV1500	550÷0÷1500
C.INV2000	550÷0÷2000

C.CORS.V90°	Spare slider complete with pin
C.PERS.V90°	V-90° pin

## GAUGE FOR INSIDE/OUTSIDE MEASURING

ART. C.LIE

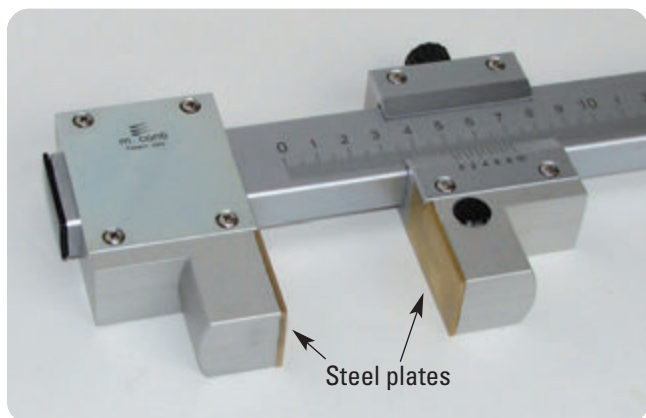


Suitable for measuring big dimension openings (min. 50 mm) on wood panels and frames. For inside measurements mm 50 is to be added.

Item	Measuring range
C.LIE0500	0÷500
C.LIE0750	0÷750
C.LIE1000	0÷1000
C.LIE1500	0÷1500
C.LIE2000	0÷2000
C.LIE2500	0÷2500
C.LIE3200	0÷3200

## GAUGE FOR INSIDE/OUTSIDE MEASURING WITH STEEL PLATES

ART. C.LIE.PA



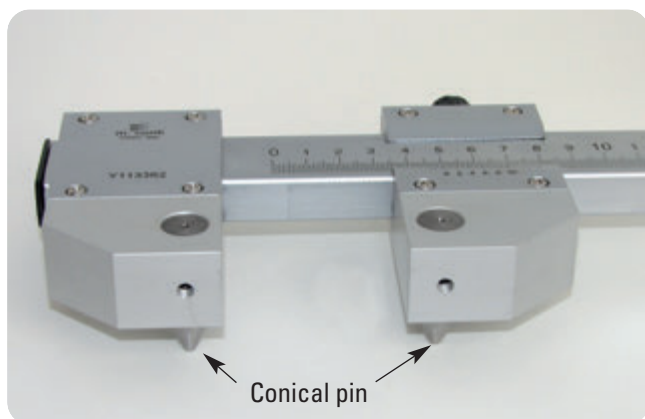
Suitable for measuring big dimension openings (min. 50 mm) on glass, alu, metal and PVC items.

Plates in TIN coated high resistance steel.

Item	Measuring range
C.LIE.PA0500	0÷500
C.LIE.PA0750	0÷750
C.LIE.PA1000	0÷1000
C.LIE.PA1500	0÷1500
C.LIE.PA2000	0÷2000
C.LIE.PA2500	0÷2500
C.LIE.PA3200	0÷3200

## GAUGE FOR LINEAR MEASUREMENTS AND DISTANCE BETWEEN CENTRES

ART. C.LIN.PI

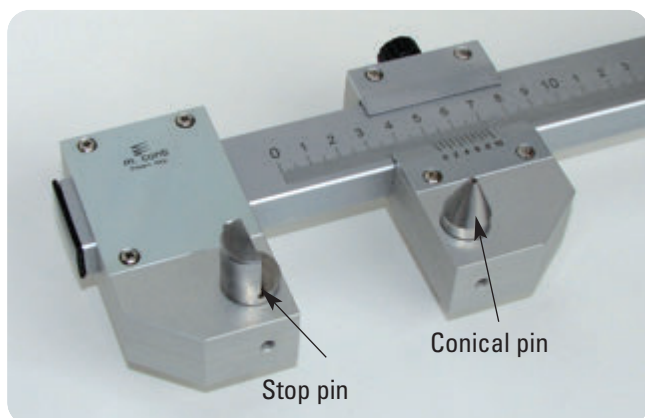


The length is read directly on the graduated scale, the hole distance is obtained by adding 20 mm to the value read on the scale.  
Two tapered pins are supplied as standard  $\varnothing 4/\varnothing 15$  mm.

Item	Measuring range
C.LIN.PI0500	0÷500
C.LIN.PI0750	0÷750
C.LIN.PI1000	0÷1000
C.LIN.PI1500	0÷1500
C.LIN.PI2000	0÷2000
C.LIN.PI2500	0÷2500
C.LIN.PI3200	0÷3200
C.PER.1415	Conical pin for dia. 4 - dia. 15 holes

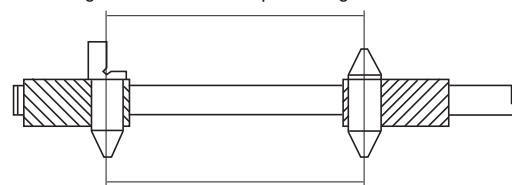
## GAUGE FOR LINEAR MEASUREMENTS, DISTANCE FROM THE CENTRES OF THE HOLE TO THE EDGE OF THE PANEL

ART. C.LIN.PB



The length is read directly on the graduated scale, the hole distance is obtained by adding 20 mm to the value read on the scale. Two pins are supplied as standard (one tapered of  $\varnothing 4/\varnothing 15$  mm and one as stop).  
With the left pin the distance between the edge of the panel and the centre of the hole can be measured.

Measuring of the distance of panel edge to the hole centres



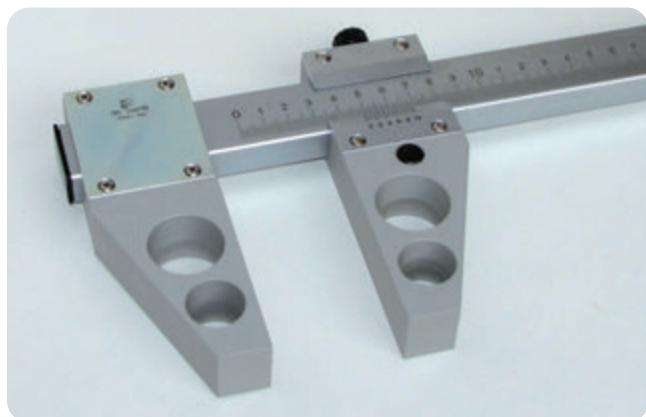
Measuring of distance between hole centres

Item	Measuring range
C.LIN.PB0500	0÷500
C.LIN.PB0750	0÷750
C.LIN.PB1000	0÷1000
C.LIN.PB1500	0÷1500
C.LIN.PB2000	0÷2000
C.LIN.PB2500	0÷2500
C.LIN.PB3200	0÷3200
C.PER.1415	Conical pin for dia. 4 - dia. 15 holes
C.PER.B12	Stop pin



## GAUGE FOR LINEAR MEASUREMENTS, WITH LONG JAWS

ART. C.LIN.L

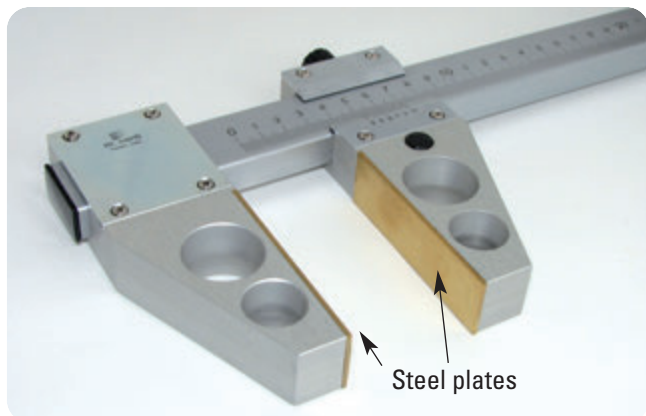


Suitable for measuring width and length of wood panel  
**JAW LENGTH 97 mm.**

Item	Measuring range
C.LIN.L0500	0÷500
C.LIN.L0750	0÷750
C.LIN.L1000	0÷1000
C.LIN.L1500	0÷1500
C.LIN.L2000	0÷2000
C.LIN.L2500	0÷2500
C.LIN.L3200	0÷3200

## GAUGE FOR LINEAR MEASUREMENTS, WITH LONG JAWS AND STEEL PLATES

ART. C.LIN.L.PA



Suitable for measuring the width and length of glass and aluminium items and when cutting sheet metal.  
**JAW LENGTH 97 mm.**

Plates in TIN coated high resistance steel.

Item	Measuring range
C.LIN.L.PA0500	0÷500
C.LIN.L.PA0750	0÷750
C.LIN.L.PA1000	0÷1000
C.LIN.L.PA1500	0÷1500
C.LIN.L.PA2000	0÷2000
C.LIN.L.PA2500	0÷2500
C.LIN.L.PA3200	0÷3200

## GAUGE FOR 45° CUTS

ART. C.L45

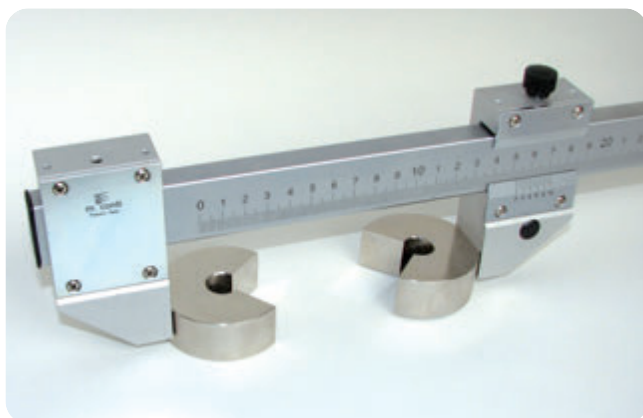


Suitable for the production of frames, sashes and other components with 45° angles.  
Minimum measurable length - 80mm.

Item	Measuring range
C.L45.0500	80÷500
C.L45.0750	80÷750
C.L45.1000	80÷1000
C.L45.1500	80÷1500
C.L45.2000	80÷2000
C.L45.2500	80÷2500
C.L45.3200	80÷3200

## GAUGE FOR DIAGONAL AND OUT OF SQUARE MEASUREMENTS

ART. C.LIN.D



Suitable for measuring the out of square of a panel or any diagonal line



2 reference steel discs included

Item	Measuring range
C.LIN.D.0500	0÷500
C.LIN.D.0750	0÷750
C.LIN.D.1000	0÷1000
C.LIN.D.1500	0÷1500
C.LIN.D.2000	0÷2000
C.LIN.D.2500	0÷2500
C.LIN.D.3200	0÷3200

### Spare parts

C.DIS.040	D=40 - 90° cut - Reference steel disc
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## OPTICAL LENS

ART. C.LETTORE



Used to improve the evaluation of the scale in case of reading from a distance. Made of anodized aluminium dia. 50 mm, it can be used with any gauge.

### ITEM

C.LETTORE

### Dimension

Ø 50

## GAUGE CASE

ART. AST.CAL



Very useful for protecting the gauge when this is not in use or for transport. Made of wood.

### Item

AST.CAL.

### Dimension

800X150

## TEST REPORTER

ART. CERT.

On request, all gauges can be supplied with our test report which certifies the accuracy every 100 mm.

The gauges are tested using certified gauge blocks.

Item	Gauge measuring range
CERT.0500	500
CERT.0750	750
CERT.1000	1000
CERT.1500	1500
CERT.2000	2000
CERT.2500	2500
CERT.3200	3200

## GAUGES DIGIT +

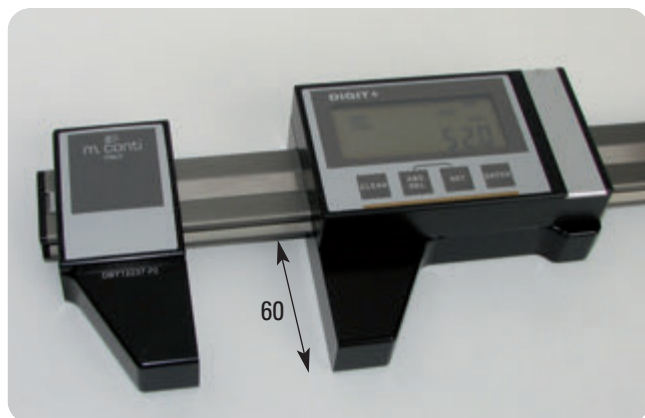
The Digit + digital gauges have been designed and developed to meet the need to take as quickly as possible the measurements of the dimensions of the panels in the production units.

Thanks to digital technology and to the large and easy to use display, the subjectivity of the operator is bypassed and the maximum precision is ensured.

All Digit + can be supplied on request with centesimal resolution (0.01 mm) and / or serial output.

## GAUGES FOR LINEAR MEASUREMENTS

### ART. DIGIT950

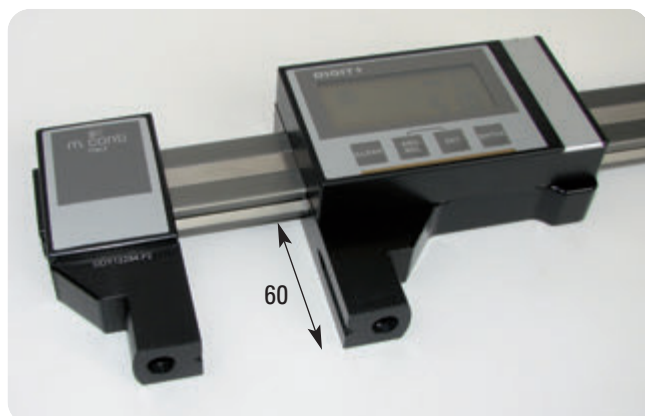


- Resolution 0,1 mm
- Light, precise and easy to use
- Battery powered (1 battery 1,5 V type AA)
- Measuring system by magnetic strip on production
- Display functions:
  - absolute/relative
  - selection of measuring mode
  - programmable automatic shutdown
  - mm/inches conversion
  - large display for easy reading
- Bars and jaws are made of anodized aluminium with 500 HV hardness on the surface

Item	Measuring range
DIGIT950.0500	0÷500
DIGIT950.0750	0÷750
DIGIT950.1000	0÷1000
DIGIT950.1500	0÷1500
DIGIT950.2000	0÷2000
DIGIT950.2500	0÷2500
DIGIT950.3100	0÷3100

## GAUGES FOR LINEAR-INSIDE/OUTSIDE MEASUREMENTS

### ART. DIGIT955



- Resolution 0,1 mm
- Light, precise and easy to use
- Battery powered (1 battery 1,5 V type AA)
- Measuring system by magnetic strip on production
- Display functions:
  - absolute/relative
  - selection of measuring mode
  - programmable automatic shutdown
  - mm/inches conversion
  - large display for easy reading
- Bars and jaws are made of anodized aluminium with 500 HV hardness on the surface

- Optional: pins + reference jig for measuring distances between holes

Item	Measuring range
DIGIT955.0500	0÷500
DIGIT955.0750	0÷750
DIGIT955.1000	0÷1000
DIGIT955.1500	0÷1500
DIGIT955.2000	0÷2000
DIGIT955.2500	0÷2500
DIGIT955.3100	0÷3100

## GAUGE FOR LINEAR, INSIDE/OUTSIDE, DISTANCE BETWEEN HOLES, OUT OF SQUARE ANGLES MEASUREMENTS

ART. DIGIT990

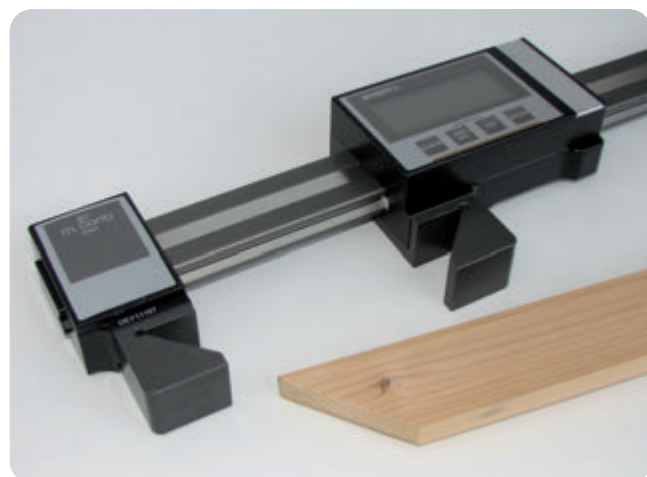


- Resolution 0,1 mm
- Light, precise and easy to use
- Battery powered (1 battery 1,5 V type AA)
- Measuring system by magnetic strip our production
- Display functions:
  - absolute/relative
  - selection of measuring mode
  - programmable automatic shutdown
  - mm/inches conversion
  - large display for easy reading
- Bars and jaws are made of anodized aluminium with 500 HV hardness on the surface

Item	Measuring range
DIGIT990.0500	0÷500
DIGIT990.0750	0÷750
DIGIT990.1000	0÷1000
DIGIT990.1500	0÷1500
DIGIT990.2000	0÷2000
DIGIT990.2500	0÷2500
DIGIT990.3100	0÷3100

## GAUGE FOR 45° CUTS

ART. DIGIT991



- Resolution 0,1 mm
- Light, precise and easy to use
- Battery powered (1 battery 1,5 V type AA)
- Measuring system by magnetic strip our production
- Display functions:
  - absolute/relative
  - selection of measuring mode
  - programmable automatic shutdown
  - mm/inches conversion
  - large display for easy reading
- Bars and jaws are made of anodized aluminium with 500 HV hardness on the surface

Suitable for the production of frames, sashes and other components with 45° angles.  
Minimum measurable length - 80mm.

Item	Measuring range
DIGIT991.0750 <b>NEW</b>	0÷750
DIGIT991.1000 <b>NEW</b>	0÷1000
DIGIT991.1500 <b>NEW</b>	0÷1500
DIGIT991.2000 <b>NEW</b>	0÷2000
DIGIT991.2500 <b>NEW</b>	0÷2500
DIGIT991.3100 <b>NEW</b>	0÷3100

## GAUGE FOR LINEAR, INSIDE/OUTSIDE, DISTANCE BETWEEN HOLES, OUT OF SQUARE ANGLES MEASUREMENTS DIGIT992



- Resolution 0,1 mm
- Light, precise and easy to use
- Battery powered (1 battery 1,5 V type AA)
- Measuring system by magnetic strip our production
- Display functions:
  - absolute/relative
  - selection of measuring mode
  - programmable automatic shutdown
  - mm/inches conversion
  - large display for easy reading



2 reference steel discs included

Item	Measuring range
DIGIT992.1000	0÷1000
DIGIT992.1500	0÷1500
DIGIT992.2000	0÷2000
DIGIT992.2500	0÷2500
DIGIT992.3100	0÷3100

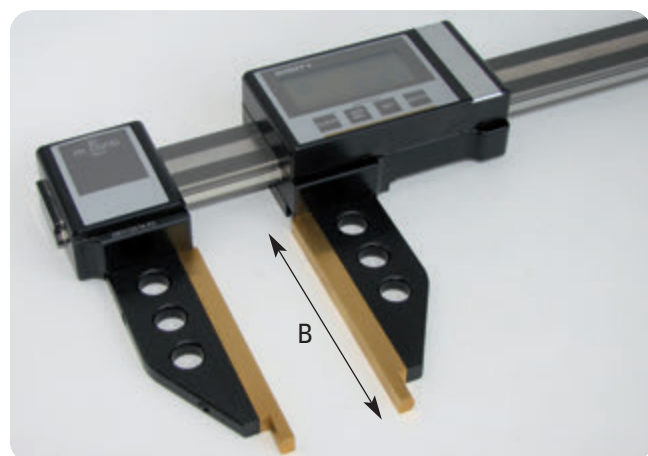
### Spare parts

C.DIS.040	D=40 - 90° cut - Reference steel disc
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## GAUGE FOR LINEAR MEASUREMENTS, LONG JAWS

ART. DIGIT980/985/986/987



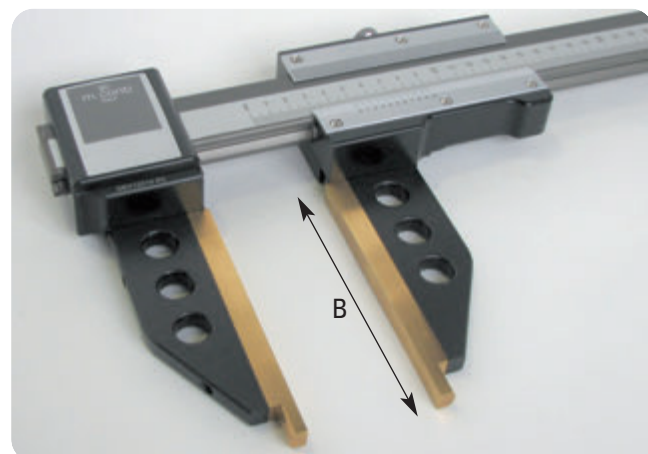
- Light-weight but at the same time rigid and accurate
- Battery-powered (nr. 1 Battery 1,5 type AA)
- Measuring system by magnetic strip our production
- Main display features: absolute/relative measuring, selection of measuring mode, programmable automatic shutdown, mm/inch conversion, large numbers display for easy reading.

- **STEEL PLATES**
- **JAWS WITH LIGHTENING HOLES**

Item	Measuring range	B	Item	Measuring range	B
DIGIT980.1000 <b>NEW</b>	0÷1000	100	DIGIT986.1000 <b>NEW</b>	0÷1000	200
DIGIT980.1500 <b>NEW</b>	0÷1500	100	DIGIT986.1500 <b>NEW</b>	0÷1500	200
DIGIT980.2000 <b>NEW</b>	0÷2000	100	DIGIT986.2000 <b>NEW</b>	0÷2000	200
DIGIT980.2500 <b>NEW</b>	0÷2500	100	DIGIT986.2500 <b>NEW</b>	0÷2500	200
DIGIT980.3100 <b>NEW</b>	0÷3100	100	DIGIT986.3100 <b>NEW</b>	0÷3100	200
DIGIT985.1000 <b>NEW</b>	0÷1000	150	DIGIT987.1000 <b>NEW</b>	0÷1000	300
DIGIT985.1500 <b>NEW</b>	0÷1500	150	DIGIT987.1500 <b>NEW</b>	0÷1500	300
DIGIT985.2000 <b>NEW</b>	0÷2000	150	DIGIT987.2000 <b>NEW</b>	0÷2000	300
DIGIT985.2500 <b>NEW</b>	0÷2500	150	DIGIT987.2500 <b>NEW</b>	0÷2500	300
DIGIT985.3100 <b>NEW</b>	0÷3100	150	DIGIT987.3100 <b>NEW</b>	0÷3100	300

## GAUGE WITH NONIUS FOR LINEAR-INSIDE/OUTSIDE MEASUREMENTS, STEEL JAWS

ART. DIGIT900N



- 0,05 mm Resolution
- Light, precise and easy to use

- **STEEL PLATES**
- **JAWS WITH LIGHTENING HOLES**

Item	Measuring range	B	Item	Measuring range	B
C.LIE.L.PA.1000.100 <b>NEW</b>	0÷1000	100	C.LIE.L.PA.1000.200 <b>NEW</b>	0÷1000	200
C.LIE.L.PA.1500.100 <b>NEW</b>	0÷1500	100	C.LIE.L.PA.1500.200 <b>NEW</b>	0÷1500	200
C.LIE.L.PA.2000.100 <b>NEW</b>	0÷2000	100	C.LIE.L.PA.2000.200 <b>NEW</b>	0÷2000	200
C.LIE.L.PA.2500.100 <b>NEW</b>	0÷2500	100	C.LIE.L.PA.2500.200 <b>NEW</b>	0÷2500	200
C.LIE.L.PA.3100.100 <b>NEW</b>	0÷3100	100	C.LIE.L.PA.3100.200 <b>NEW</b>	0÷3100	200
C.LIE.L.PA.1000.150 <b>NEW</b>	0÷1000	150	C.LIE.L.PA.1000.300 <b>NEW</b>	0÷1000	300
C.LIE.L.PA.1500.150 <b>NEW</b>	0÷1500	150	C.LIE.L.PA.1500.300 <b>NEW</b>	0÷1500	300
C.LIE.L.PA.2000.150 <b>NEW</b>	0÷2000	150	C.LIE.L.PA.2000.300 <b>NEW</b>	0÷2000	300
C.LIE.L.PA.2500.150 <b>NEW</b>	0÷2500	150	C.LIE.L.PA.2500.300 <b>NEW</b>	0÷2500	300
C.LIE.L.PA.3100.150 <b>NEW</b>	0÷3100	150	C.LIE.L.PA.3100.300 <b>NEW</b>	0÷3100	300

## GAUGE WITH WIRELESS CONNECTION FOR LINEAR MEASUREMENTS

ART. DIGIT950



The DIGIT+ RF have a sender integrated in the caliper and a separate Master for receiving the data appearing on the display of the digital caliper and sent via radio frequency.

The Receiver must be connected to a Computer or any device able to process an ASCII string via RS232. In open space the transmission distance is apprx. 50 meters.

Item	Measuring range
DIGIT950.1000RF	0÷1000
DIGIT950.1500RF	0÷1500
DIGIT950.2000RF	0÷2000
DIGIT950.2500RF	0÷2500
DIGIT950.3100RF	0÷3100

## GAUGE WITH WIRELESS CONNECTION FOR LINEAR, INSIDE/OUTSIDE, DISTANCE BETWEEN HOLES, OUT OF SQUARE ANGLES MEASUREMENTS

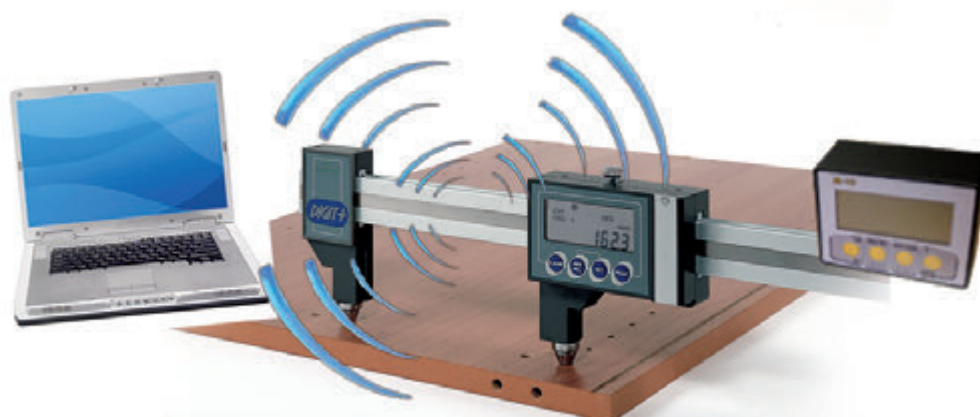
ART. DIGIT990



The DIGIT+ RF have a sender integrated in the caliper and a separate Master for receiving the data appearing on the display of the digital caliper and sent via radio frequency.

The Receiver must be connected to a Computer or any device able to process an ASCII string via RS232. In open space the transmission distance is apprx. 50 meters.

Item	Measuring range
DIGIT990.1000RF	0÷1000
DIGIT990.1500RF	0÷1500
DIGIT990.2000RF	0÷2000
DIGIT990.2500RF	0÷2500
DIGIT990.3100RF	0÷3100



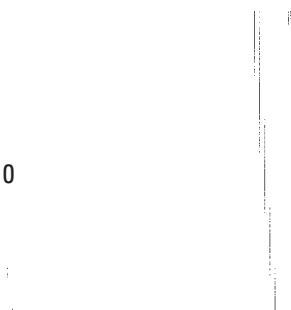
## MAGNETIC STRIP MEASURING SYSTEM

A fast and accurate system which allows reading of measurements directly on the M10 display. It is extremely easy to apply – just fix the magnetic strip on a suitable surface of the machine with double-sided adhesive tape and fit the display with the sensor on the movable part. When movement is made, the display indicates the position with respect to a machine reference. The measuring system can be used on PANEL SIZING MACHINES, ROLLER BEDS FOR MITRE SAWS, BORING MACHINES, CIRCULAR SAWS etc.



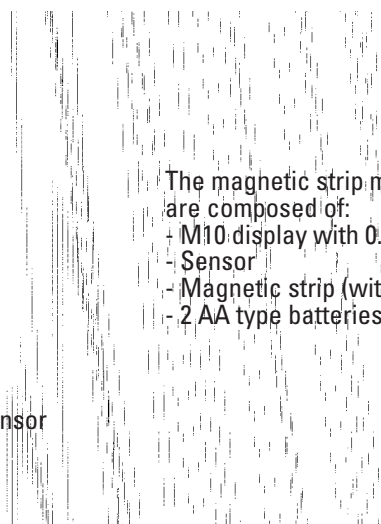
Item	Dimension
K.M.1000	Magnetic strip length 1000 mm
K.M.1500	Magnetic strip length 1500 mm
K.M.2000	Magnetic strip length 2000 mm
K.M.3000	Magnetic strip length 3000 mm
K.M.4500	Magnetic strip length 4500 mm

Display M10



Sensor

Magnetic strip



The magnetic strip measuring system is supplied in kits, they are composed of:

- M10 display with 0.5 m cable
- Sensor
- Magnetic strip (with double-sided tape)
- 2 AA type batteries

### MAIN CHARACTERISTICS

- M10 display dimensions: 96x72x27 mm
- battery-powered with 1.5V AA type battery with a 12-month life
- system accuracy: 0.1 mm
- 5 incremental counting
- 5 programmable offsets
- programmable zero point
- battery check
- self diagnostic in real-time
- wide installation tolerances
- parameters stored in permanent memory
- battery voltage control shown on the display
- multifunction LCD display
- 4-key display keypad
- operating temperature: 5° - 60°C
- storage temperature: -20° - 70°C
- max. humidity: 95% (condensation not permitted)

- magnetic strip: 10x2 mm
- type of magnetic strip: MT500
- distance between magnetic strip and sensor: max. 2.5 mm



Application on panel sizing machines for squaring cuts

## ELECTRONIC WORK STATION

For modern panel production for the furniture industry, adequate quality control is indispensable. During the production, to set up the manufacturing machines, at the end of the work shift for quality control, on acceptance of semi-finished products from third parties and for product certification, the electronic work station ensures the quality of your products and cuts machine stops and the time taken for assembly, thereby increasing productivity.



Item	Description
BCE 22 Y07-R	dimension 2.200 mm x 700 mm - panels/BCE 40 mm - thickness 0,1 mm with 6-position revolver
BCE 25 Y10-R	dimension 2.500 mm x 1.000 mm - panels/BCE 40 mm - thickness 0,1 mm with 6-position revolver
BCE 31 Y10-R	dimension 3.100 mm x 1.000 mm - panels/BCE 40 mm - thickness 0,1 mm with 6-position revolver



Execution with 6-position revolver to speed up feeler pin change

### THANKS TO THIS WORK STATION YOU CAN CHECK

- Panel dimensions
- Out of square angles
- Distances between hole centres
- Parallelism and orthogonality between holes
- Depth of vertical and horizontal holes
- Dimension of grooves on panels
- Profiles on shaped panels
- Possibility of zero-setting to left and right



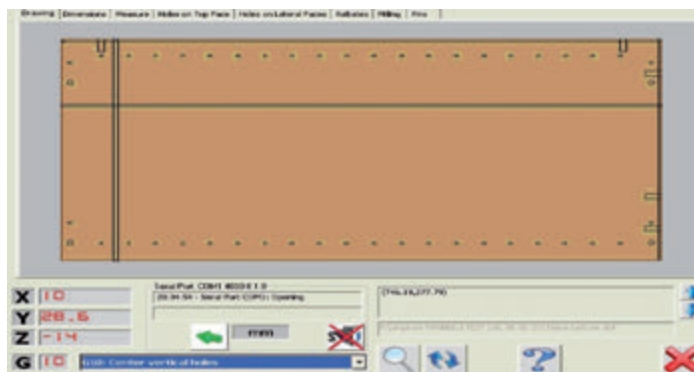
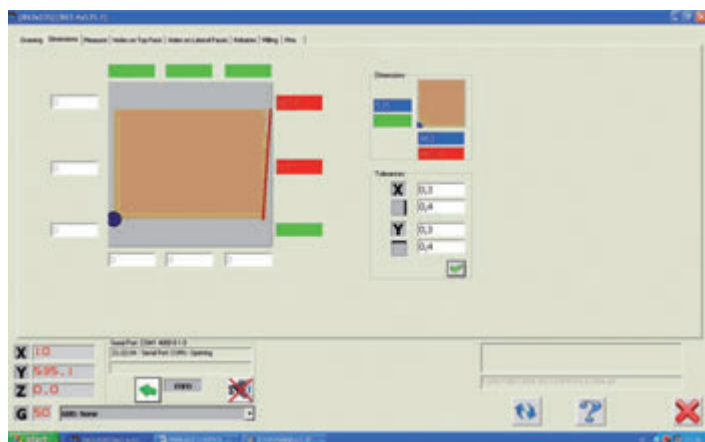
Blocking system by means of 2 vacuum units  
Useful when small panels are measured (optional)

The electronic workstation is a real "quality control station" able to check almost all dimensions on the length, width and thickness of the panel. The tolerance of max. 0,1mm mistake on the whole device surface is guaranteed. First quality components as well as highly automated processing cycle ensure the extreme precision of the workstation. Last production step consists in the complete and scrupulous inspection effected also using certified block gauges. The electronic workstation can also operate in dusty environment.

## SOFTWARE (optional)

For a rational use of the electronic workstation , a special software program has been developed to suit the requirements of modern furniture production and semi-finished products.

Completely worked out at **M.Conti** in collaboration with expert computer engineers and advise from important manufacturing companies, the software has been developed considering and trying to solve all producers' requirements.



## SOFTWARE SPECIFICATION

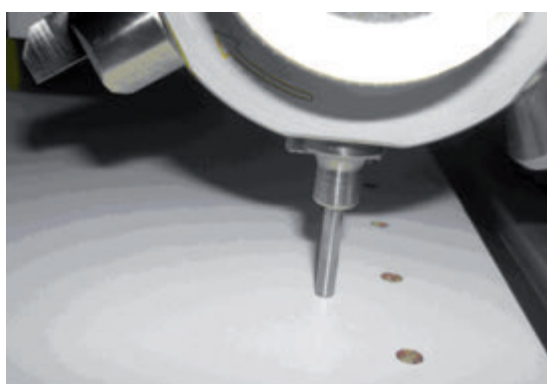
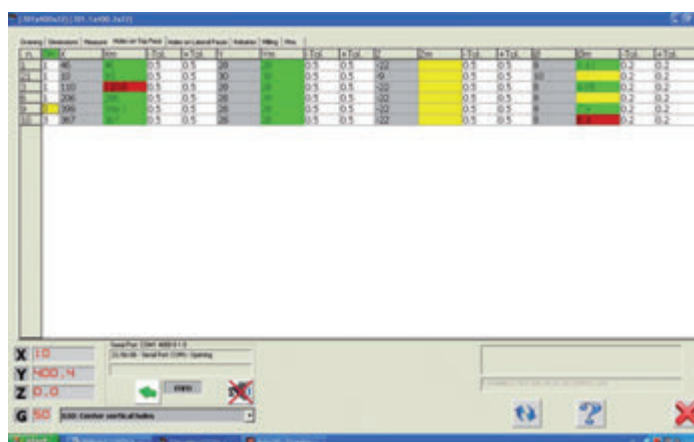
1) To **check and compare** a finished piece, or a CAD execution of the piece.

The elements which can be measured are:

1. Panel squaring
2. Vertical holes
3. Horizontal holes
4. Cuts
5. Relative distances

Using the software program we can visualize the measuring taken on the display and compare them with those requested thus detecting any mistake in production or out of tolerance dimension

A final report showing the measures taken can be printed, stored or attached to the production batch.



## 2) Graphic mode:

To **digitise a sample piece** and create a DXF file.

The elements which can be digitised are:

1. Curves



Side stop,  
longer execution  
(optional )

## OPTIONAL FEATURES

Item	Description
AS1500201	software program
SPP040077	Z-axis
SPP040079	panel hold down system
SPP040107	additional vacuum unit
SPP040080	6 adapters revolver
AS1500224	higher side stop